Response to Office Action Dated 01/27/2005

<u>REMARKS</u>

2

3

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A review of the claims indicates that:

- A) Claims 1, 2, 4—22 remain in their original form.
- B) Claim 3 is currently cancelled.

In view of the following remarks, Applicant respectfully requests reconsideration of the rejected claims.

35 U.S.C. §112

The Patent Office objected to the phrase "to normalize an output of at least one non-least dynamic printer in the cluster." The Applicant respectfully traverses the objection.

The Applicant suggests that the Patent Office feels the phrase is unclear because it is unusual to have the phases "at least" and "non-least dynamic" in the same sentence. However, there is nothing wrong with this.

The phrase "at least one" means much the same as "one or more." The phrase "non-least dynamic" is essentially an adjective phrase modifying the word printer. It says that the printer to be normalized is not the least dynamic printer in the cluster. Thus, the claim recites normalizing the output of one or more printers, wherein the printers to be normalized are not the least dynamic printers within the cluster.

Accordingly, the Applicant feels that this wording is logical and makes sense, and would like more clarification if the Office persists in the objection.

2

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Response to Office Action Dated 01/27/2005

35 U.S.C. §102 Rejections

Applicant submits that the Office has failed to establish a prima facte case of anticipation and respectfully traverses the Office's rejections. However, before discussing the substance of the Office's rejections, a section entitled "The §102 Standard" is provided and will be used in addressing the Office's rejections. Following this section, a section entitled "The Lin Reference" is provided, which describes Lin's disclosure and teachings.

The §102 Standard

According to the MPEP §2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim.

Anticipation is a legal term of art. The applicant notes that in order to provide a valid finding of anticipation, several conditions must be met: (i) the reference must include every element of the claim within the four corners of the reference (see MPEP §2121); (ii) the elements must be set forth as they are recited in the claim (see MPEP §2131); (iii) the teachings of the reference cannot be modified (see MPEP §706.02, stating that "No question of obviousness is present" in conjunction with anticipation); and (iv) the reference must enable the invention as recited in the claim (see MPEP §2121.01). Additionally, (v) these conditions must be simultaneously satisfied.

Z

Response to Office Action Dated 01/27/2005

The §102 rejection of claims 1-9, 12-13 and 15-21 is believed to be in error. Specifically, the PTO and Federal Circuit provide that §102 anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). The corollary of this rule is that the absence from a cited §102 reference of any claimed element negates the anticipation. Kloster Speedsteel AB, et al. v. Crucible, Inc., et al., 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986).

The applicant notes the requirements of MPEP §2131, which states "to anticipate a claim, the reference must teach every element of the claim." This MPEP section further states that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). 'The identical invention must be shown in as complete detail as is contained in the ... claim.' Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."

2

3

4

6

8

9

10

11

12

13

14

15

16

17

۱ĸ

19

20

21

22

23

24

25

Response to Office Action Dated 01/27/2005

The Lin Reference

Generally, Lin discloses a way to calibrate a network copy system (see Title). Lin provides a technique to minimize variations in output images generated by different output devices (col. 9, lines 33-35). Lin notes that two printers of the same model can produce different output (col. 9, lines 15-18 and 27-30). In particular, Lin teaches that a reference device may be selected, while the other devices are considered non-reference devices (col. 9, lines 37-43). Four 1-D look-up tables are created for each non-reference printer, so that the output of these printers is the same or very similar to the reference printer, i.e. the non-reference printers are calibrated to the reference printer (Abstract and other locations).

Traversal of the §102 Rejections

Claims 1-9, 12-13 and 15-21 were rejected under §102 as being anticipated by U.S. Patent No. 6,404,511, hereinafter "Lin." In response, the Applicant respectfully traverses the rejection.

Claim 1 recites calculating look-up tables for a cluster of printers comprising:

- determining a least dynamic printer in the cluster; and
- calculating corrected input values required to normalize an output of at least one non-least dynamic printer in the cluster.

The Lin reference does not teach "determining a least dynamic printer in the cluster," as recited by claim 1. Lin teaches assembling a group of printers and

Response to Office Action Dated 01/27/2005

simply selecting one of them to be the reference printer (col. 9, lines 33-43). Lin does not teach determining a least dynamic printer in the cluster.

The Patent Office suggests that the non-reference printers are analogous to the "least dynamic printer" recited by the Applicant's claim. The Applicant respectfully disagrees.

The non-reference printers are plural, that is, there are more than one of them. Accordingly, they cannot be analogous to "a least dynamic printer," which is singular. As Lin recognizes (col. 9, lines 15-18) all printers are a little bit different. The Applicant recites "a least dynamic printer" as a target to which the non-least dynamic printers are normalized. The target to which other printers are normalized cannot be one including many non-reference printers.

Therefore, Lin does not teach determining a least dynamic printer or even the existence of a least dynamic printer. It is a significant aspect of the Applicant's claim that the non-least dynamic printers are normalized to the least dynamic printer.

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claim 2 depends from Claim 1 and is allowable due to its dependence from an allowable base claim. This claim is also allowable for its own recited features that, in combination with those recited in Claim 1, are neither disclosed nor

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Response to Office Action Dated 01/27/2005

suggested in references of record, either singly or in combination with one another.

Claim 3 is cancelled.

Claim 4 recites:

 wherein a least dynamic printer is determined for each primary color.

In general, the Lin reference does not determine a least dynamic printer. In particular, Lin does not determine a least dynamic printer for each primary color.

The Patent Office suggests that col. 10, lines 44—60 disclose the recited subject matter. The Applicant respectfully traverses the rejection.

Column 10 discloses that transfer functions for each primary color are calculated, and that the non-reference printers may be calibrated to the reference printer. However, <u>Lin does not disclose determining a least dynamic printer generally</u>, and <u>does not disclose determining a least dynamic printer for each primary color</u>.

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claims 5 and 6 depend from Claim 1 and are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are

Response to Office Action Dated 01/27/2005

neither disclosed nor suggested in references of record, either singly or in combination with one another.

3

2

Claim 7 recites a method for calibrating a cluster of printers comprising:

printing a calibration target with each printer in the cluster; measuring each calibration target to produce measurement data;

6

calculating transfer functions for each printer in the cluster;

7

· determining a least dynamic printer in the cluster;

8

calculating corrected input values required to normalize output of non-least dynamic printers in the cluster;

9

organizing the corrected input values into look-up tables; and

10

sending the look-up tables to each printer within the cluster.

11

The Lin reference does not disclose "determining a least dynamic printer."

12

In fact, Lin is generally silent about how the reference printer is selected.

13

The Patent Office suggests that the non-reference printers are analogous to

the least dynamic printer. The Applicant respectfully disagrees.

non-reference printers to that printer (Abstract, first two lines).

14 15 The non-reference printers are not all "least dynamic printers." In fact,

16 17 only one of them could be the "least dynamic." Moreover, Lin does not disclose any selection process by which the "least dynamic" printer is selected. Lin simply

19

20

18

selects a printer (the reference printer, column 9, line 41), and then calibrates the

21

22

23

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

24

25

2

3

4

5

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Response to Office Action Dated 01/27/2005

Claims 8, 9 and 12 depend from Claim 1 and are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Claim 13 recites calibrating a cluster of printers comprising:

- printing a calibration target with each printer in the cluster;
- measuring each calibration target to produce measurement data;
- calculating transfer functions for each primary color and for each printer in the cluster;
- determining a least dynamic printer in the cluster with respect to each primary color;
- calculating corrected input values required to normalize output of non-least dynamic printers in the cluster to the least dynamic printer in each cluster with respect to each primary color;
- organizing the corrected input values into look-up tables; and
- sending the look-up tables to each printer within the cluster for inclusion in a color data flow.

The Lin reference does not disclose "determining a least dynamic printer in the cluster with respect to each primary color." Therefore, the rejection of claim 13 is improper for the same reason the rejection of claim 4 is improper. Accordingly, the argument with respect to claims 1 and 4 is incorporated at this location by reference.

The Patent Office suggests that columns 9—11 disclose determining a least dynamic printer. However, Lin does not disclose determining a least dynamic printer, generally, or with respect to primary colors in particular.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Response to Office Action Dated 01/27/2005

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claim 15 recites a cluster of printers comprising:

- at least two printers;
- a transfer function calculator to derive a transfer function for each printer with respect to at least one color;
- a least dynamic response selector to determine a least dynamic printer from within the cluster of printers for at least one color;
- a normalizer for calculation of corrected input values required to normalize more dynamic printers' output with respect to the least dynamic printer; and
- a look-up table assembler to organize the corrected input values into look-up tables.

The Lin reference does not disclose a "a least dynamic response selector to determine a least dynamic printer from within the cluster of printers for at least one color." Lin does not disclose selecting a least dynamic printer.

The Patent Office suggests that control unit 50 of FIG. 2 is such a selector. However, control unit 50 is an interface to scanner 51 (column 5, lines 15—17). As an interface, control unit 50 is not a selector that is configured to determine a least dynamic printer from within the cluster of printers for at least one color.

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

3 4

6 7

9

11

8

12

15

14

17 18

19

20

16

21 22

23

24

25

Claim 16 depends from Claim 15 and is allowable due to its dependence from an allowable base claim. This claim is also allowable for its own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Claim 17—19 were rejected as corresponding to claims 7—12. Accordingly, the Applicant respectfully traverses the rejection, and incorporates by reference the arguments of claims 7—12.

Claim 20—21 were rejected as corresponding to claims 15—16.

Accordingly, the Applicant respectfully traverses the rejection, and incorporates by reference the arguments of claims 15—16.

The §103 Rejections

The Applicant submits that the Office has failed to establish a prima facie case of obviousness and, in view of the comments below, respectfully traverses the Office's rejections. However, before discussing the substance of the Office's rejections, a section entitled "The §103 Standard" is provided and will be used in addressing the Office's rejections.

The §103 Standard

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In re Jones, 958

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Response to Office Action Dated 01/27/2005

F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Hence, when patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine or modify the references relied on as evidence of obviousness. The need for specificity pervades this authority. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed").

Traversal of the §103 Rejections

Claims 10, 11, 14 and 22 stand rejected under 35 U.S.C. §103(a) as being obvious over Lin in view of U.S. Pat. No. 6,172,771 hereinafter "Ikeda." In response, the Applicant respectfully traverses the rejection.

The Ikeda reference fails to remedy the failings of Lin. In particular, Ikeda fails to disclose "determining a least dynamic printer in the cluster." Because

Response to Office Action Dated 01/27/2005

Ikeda fails to remedy Lin, the rejection of claims 7, 13 and 20, from which claims 10, 11, 14 and 22 depend, is improper.

Therefore, because claims 10, 11, 14 and 22 depend from claims 7, 13 and 20, these claims are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Therefore, even in combination, the Lin and Ikeda references fail to disclose elements recited in the Applicant's claim. Accordingly, the section 103 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

_ _

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Response to Office Action Dated 01/27/2005

Conclusion

The Applicant submits that all of the claims are in condition for allowance and respectfully requests that a Notice of Allowability be issued. If the Office's next anticipated action is not the issuance of a Notice of Allowability, the Applicant respectfully requests that the undersigned attorney be contacted for scheduling an interview.

Respectfully Submitted,

Dated: 4-26-05

David S. Thompson

Rcg. No. 37,954

Attorney for Applicant

LEE & HAYES PLLC

Suite 500

421 W. Riverside Avenue Spokane, Washington 99201

Telephone: 509-324-9256 x235

Facsimile: (509) 323-8979

24 25